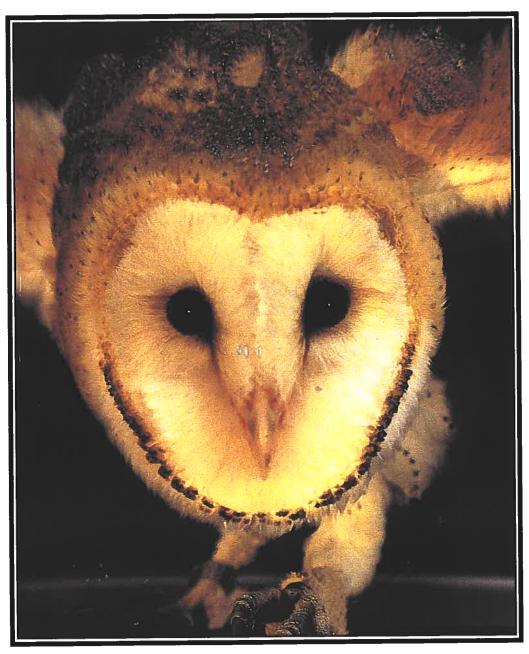
Characteristic Flora & Fauna



of READINGTON TOWNSHIP NEW JERSEY

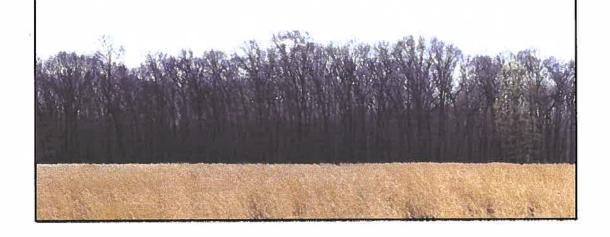
"FOR IN THE END,

WE WILL CONSERVE ONLY WHAT WE LOVE,

WE WILL LOVE ONLY WHAT WE UNDERSTAND,

AND WE WILL UNDERSTAND ONLY WHAT WE ARE TAUGHT"

—BABA DIOUM





This booklet is dedicated

to all those hwo have entered their land

into Readington Township's land preservation programs,

and all those who have supported these landowners

in their preservation effort.

Produced by
READINGTON TOWNSHIP
ENVIRONMENTAL COMMISSION,
APRIL 2001

Written by
R. Daniel Allen,
member, Readington Township
Environmental Commission.



Profiles of characteristic Flora and Fauna are provided for the following Readington Township habitats

MATURE FOREST HABITAT • PAGE 4

AGRICULTURAL LANDSCAPES • PAGE 12

GRASSLANDS • PAGE 20

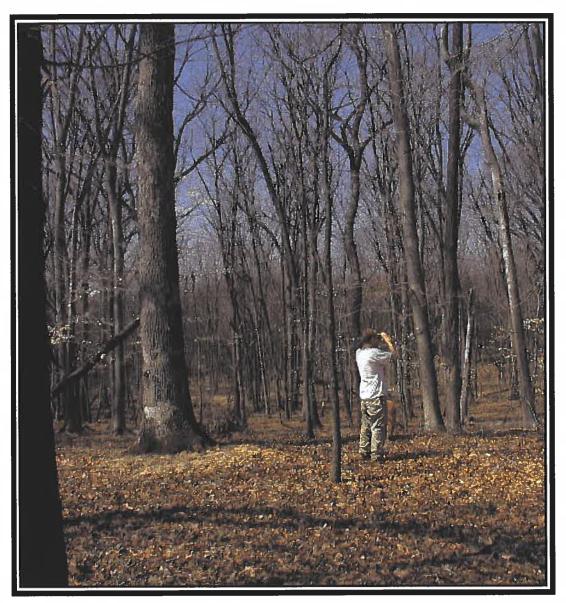
WETLANDS, STREAMS, AND RIVERS • PAGE 26

SUCCESSIONAL HABITAT • PAGE 32

SUBURBAN HABITAT • PAGE 38



Mature Forest



"I WALK AS ONE SPECIES AMONG MANY. . ."
—DON FREIDAY, NATURALIST, HUNTERDON COUNTY PARKS



CHARACTERISTIC FLORA AND FAUNA OF MATURE FOREST HABITAT IN READINGTON TOWNSHIP



CANOPY TREES

oak (white, black, northern red, scarlet, pin, chestnut, swamp white), maple (red, sugar, silver, boxelder), american beech, tulip tree, ash (white, green), hickory (shagbark, mockernut, pignut, bitternut), elm (American, slippery), black birch, black walnut, butternut, black cherry, blackgum, american basswood, sassafass, plus remnant plantings of locally-non-native white pine, Norway spruce, Austrian pine, and scotch pine.

UNDERSTORY TREES

flowering dogwood, shadbush, hornbeam (eastern hop, ironwood), american chestnut

SHRUBS

viburnum (blackhaw, mapleleaf), dogwood (silky, gray), spicebush, witch hazel, lowbush blueberry, bladdernut

VINES

grape (fox, etc.), poison ivy, virginia creeper

HERBS

Jack-in-the-pulpit, mayapple, false Solomon's Seal, white wood aster, trout lily, spring beauty, common violet, Indian pipe, spotted wintergreen, showy orchis, bugbane, cluster-leaved tick trefoil, northern maidenhair, common polypody, christmas fern

MOSSES AND LICHENS

common greenshield lichen, speckled grayshield lichen

MAMMALS

squirrel (gray, flying, red), eastern chipmunk, raccoon, black bear, white-footed mouse, striped skunk

BIRDS

pileated woodpecker, american redstart, black and white warbler, wood thrush, ovenbird, veery, scarlet tanager, cooper's hawk, rose-breasted grosbeak, barred owl, blue jay, long-eared owl

HERPETILES

wood turtle, box turtle, red-backed salamander

INVERTEBRATES

katydid, cicada, black carpenter ant, pigeon horntail, spring azure, mourning cloak, luna moth, polyphemous moth, cecropia moth, plus many species of soil dwelling invertebrates (e.g., earthworms, mites, beetles, etc.)

FUNGI

chicken mushroom, hen-of-the-woods, russula spp., amanita spp., bolette spp., shelf fungi, jelly fungi, puffballs, earthstars

















Northern red oak

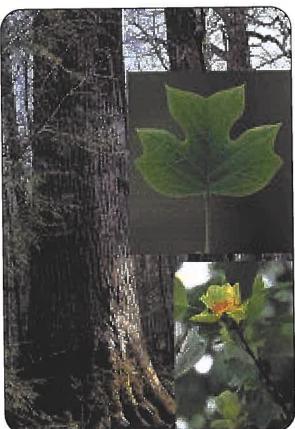
The state tree of NJ; a very valuable member of mature forest habitat found in most woodland areas in Readington; many insects feed on its spring and summer foliage, which, in turn, attracts a wide variety of migrating and nesting songbirds; these include many species of warbler, vireos, woodpeckers, scarlet tanagers, rose-brasted grosbeaks, etc.; fall crop of acorns are a very important food for wildlife, including wild turkeys, squirrels, blue jays, and white-tailed deer; fallen leaves decompose to form an organic-matter-rich, spongy forest floor.



RED OAK LEAVES

Tulip tree

Often the tallest, straightest tree in the forest; can grow to over 100' tall; beautiful orange-yellow flowers (although often difficult to see in tall canopy); seeds from trees on Cushetunk and Round mountains can be blown long distances within the Township.



TULIP TREE

American chestnut

This once-common and very valuable matureforest tree is now quite rare due to an introduced fungus; it now grows to only 20-30' before dying back and re-sprouting from the roots; A keen observer may be able to locate a few small specimens from the trails on Cushetunk mountain.



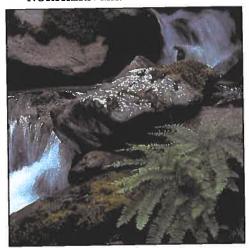
CHESTNUT TREE



FLYING SQUIRREL (text on next pg)

SHOWY ORCHIS

NORTHERN MAIDENHAIR FERN



Northern maidenhair fern

This beautiful fern can be found in moist matureforest habitat. The whorled arrangement of its fronds make it especially striking; look under leaflets to see the reproductive spore-producing structures, called sporangia. Look for it along the Peter Buel Trail on Round Mountain.

Showy orchis

This relatively rare and beautiful woodland flower can be found in high-quality mature forest

habitat, such as that found on Cushetunk mountain. A group from the Torrey Botanical Society recently spotted one there. Overbrowsing of the forest floor by white-tailed deer can be especially devastating to this and

many other woodland herbs, many of which may be severely threatened because of deer overpopulation.

Flying squirrel

Although rarely seen due to its nocturnal habits, this small squirrel is a likely resident of woodlands throughout Readington township; has the ability to glide log distances by spreading flaps of skin between its fore- and hind-legs—quite a wonderous sight for those fortunate enough to witness it; depends on nesting holes in standing dead trees or hollow limbs, as well as a good crop of nuts from forest trees such as oak, hickory, and beech.

Pileated woodpecker

The largest of North America's woodpeckers; this relatively shy (but strikingly patterned and often quite loud) bird can be seen and heard in



PILEATED WOODPECKER



BLACK AND WHITE WARBLER

older mature forests, such as Cushetunk and Round mountains. It can be heard more often than seen; large, long excavated cavities in standing dead trees are a good indication that a pileated is nearby; they excavate these cavities to access ant nests in the interior of dead trees, also use excavated cavaties for nesting or sleeping; such cavities provide crucial nesting holes for many other species of mature forest wildlife, including both mammals and birds; forestry practices which remove all dead or dying trees severely decrease

the habitat quality for these woodpeckers, as well as many, many other forest species.

Black and white warbler

A member of the very diverse wood warbler family, many of which are threatened by the loss of mature forest habitat; Like many other warblers, it can be found flitting and creeping along tree branches, trunks, and leaves, looking for tasty insects; can most often be found in moist streamside areas within mature forest habi-

tat; like many forest birds, it is often heard before it is seen; its song consists of several high "wee-zy" notes.

Wood turtle

A NJ-threatened species; declining due to habitat fragmentation and loss; requires larger patches of high-quality forest habitat, interspersed with wetlands or streams; found most often in moist woods, although can range far from water; shell is strikingly patterned with a series of raised plates, each decorated with concentric grooves (thus, giving it its Latin name, Clemmys insculpta).



WOOD TURTLE

Luna moth

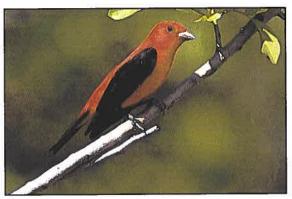
One of the largest and most beautiful of all North American moths, and a secretive resident of Readington's mature forests; 4" long, with striking wing pattern and shape; nocturnal, but can sometimes be found sleeping among the vegetation in mature-forest habitat; depends on hickories, beeches, and other mature-forest trees as food-plants; thought to be in decline due to habitat loss and pesticide use in surrounding habitats.





MAY APPLE





SCARLET TANAGER



TROUT LILY



INDIAN PIPE

Agricultural Landscape



DOBOZYNSKI FARM PARK, BLOCK 63 ROUND MOUNTAIN IN DISTANCE



CHARACTERISTIC FLORA AND FAUNA OF AGRICULTURAL LANDSCAPES IN READINGTON TOWNSHIP



FIELDS, FENCEROWS, SMALL WOODLANDS, AND CROPLAND TREES

black cherry, ash (white, green), black walnut, red mulberry, eastern redcedar, sassafrass, dogwood, maple (red, silver, boxelder), oak (red, pin), shagbark hickory, apple, crabapple

SHRUBS

blackhaw viburnum, dogwood (silky, gray), sumac (staghorn, winged, smooth)

VINES

grape spp., poison ivy, virginia creeper, greenbriar

HERBS

common milkweed, common mullein, hawkweed, ox-eye daisy, red clover, white clover, orchard grass, timothy

MAMMALS

white-tailed deer, red fox, raccoon, opossum, striped skunk, groundhog, cottontail rabbit, meadow vole, short-tailed shrew, white-footed mouse, deer mouse, squirrel (gray, red), coyote

BIRDS

red-tailed hawk, great horned owl, screech owl, indigo bunting, white-eyed vireo, northern oriole, kingbird, eastern bluebird, northern flicker, American woodcock, barn owl, barn swallow, tree swallow

HERPETILES

snakes (eastern milk, black rat, northern black racer, eastern garter), red-backed salamander, American toad, box turtle

INVERTEBRATES

monarch butterfly, bumblebee, honey bee, swallowtail (tiger, black)

HERPETILES

painted turtle, snapping turtle, spring peeper, bullfrog, green frog, pickerel frog, southern leopard frog

PLANTS

duckweed spp.

MAMMALS

muskrat

INVERTEBRATES

dragonfly spp., damselfly spp.

FISH

large-mouthed bass, bluegill, pumpkinseed sunfish

BIRDS

green heron, great blue heron, spotted sandpiper, ducks (mallard, black, wood), Canada goose, Indigo Bunting















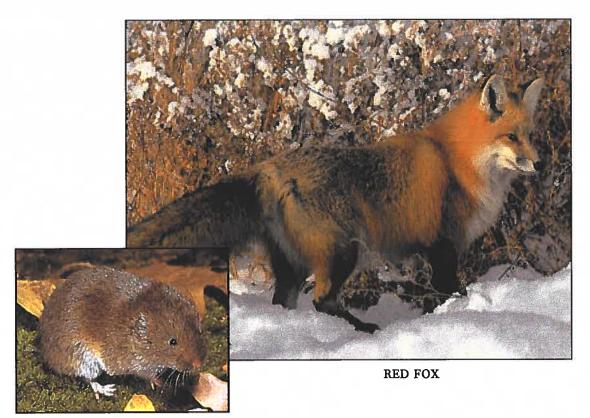




MILKWEED

Monarch butterfly/common milkweed

The beautiful monarch butterfly is dependent on the availability of plants in the milkweed family for food during its larval caterpillar stage. The monarch larvae will then attach its cocoon to the plant and pupate, emerging as a fullly-formed butterfly. Several milkweed species are associated with a diverse agricultural landscape, including swamp milkweed and dogbane; monarch migrates thousands of miles each fall to the mountains of c. Mexico, returning again in the Spring to breed; Warning coloration on both butterfly adult and caterpillar larva signify their toxicity to predators. Milkweed is a once common "edge plant" in agricultural landscapes in Readington Township. In order to provide habitat for Monarch butterflies, we must preserve the habitat for milkweed.



MEADOW VOLE

Red fox/meadow vole

Like the monarch and milkweed, these two species are closely linked; Meadow voles are herbivores which inhabit fields—especially those with a thick growth of grasses and herbs; Vole tunnels and runways can often be seen on the ground in late winter after the snow melts; Voles are very prolific breeders, and an important source of food for many predators, including red foxes, hawks, owls, and coyotes; Red foxes and other predators are most common in areas with good meadow vole populations; Foxes often dig their nest den out of an old woodchuck burrow in a field or woodland area; pups are born in early April and can often be seen from a distance, frolicking outside the den. This is still a common sight in Readington.

Great-horned owl

One of the largest owls; heard often in early spring, hooting near woodland edges; a skilled and powerful predator, feared by small mammals, as well as by other owls and hawks; by day, however, must hide from crows, which raucously mob and harass any great-horned owls who dare show themselves by daylight; use large stick-nests high-up in large trees, often former red-tailed hawk nests. It is not difficult to find a female Great-horned owl sitting on a nest in a patch of mature forest in Readington Twp.



GREAT-HORNED OWL



BARN OWL

Barn owl

A formerly-common, but now decreasing resident of Readington's agricultural landscape; prefers to nest in barns and other man-made structures; hunts rodents in fields and around farm buildings; called 'flying rat-traps' due to their skill in controlling Norway rat populations; unfortunately, a possible future addition to the NJ-threatened list. Until recently, a pair had nested annually in the abandoned water tower on the Lane/Zweerink farm on Pleasant Run Road.

Eastern bluebird

Often seen near field edges and in pastures; hunts by dropping down from perch to grab an insect, and then returning to the perch; males are a brilliant sky-blue color, while females are less strikingly colored; an Indian legend says that, due to its gentleness, the gods allowed the once-drab bird to bathe in a sacred lake of incredibly blue water, thus giving the bluebird its color; once in serious decline due to decrease in available nesting holes (due to habitat loss and European starlings), however, now making a comeback, thanks to nest boxes.



EASTERN BLUEBIRD



NORTHERN BLACK RACER

Northern black racer

This little-seen, but potentially-large (4 feet long) snake inhabits fields and open woods of agricultural landscapes; region's fastest snake; chases-down prey and bites rather than constricts; eats small rodents, frogs, other snakes, and birds; lays its eggs in rotten logs or under large stones; like many other predators, the black racer will be drawn to areas with large meadow vole populations.

American toad

A formerly very common toad, now thought to be in decline due to unknown factors; mating song is a beautiful musical trill, heard most often on warm April evenings; Dependent on habitat diversity found in agricultural landscapes; breeds in ponds, but wanders widely throughout fields and woodlands in search of insect prey.



AMERICAN TOAD



AMERICAN KESTREL

American kestrel

One of the smallest of Readington's raptors; slightly larger than a robin, member of the falcon family; often seen hovering low over open hay fields, in search of insects and voles, then drops quickly to pounce on prey.

Poison ivy

This much-maligned vine, which produces an allergic reaction in many people, is actually one of the best sources of nourishment for birds during the winter months; produces abundant white berries which are consumed by many bird species when food is otherwise scarce; vine fastens itself to tree trunks with an amazingly strong natural glue at the tips of many small fibers, which are actually modified roots; unlike other vines, rarely overgrows and kills trees.

Box turtle

Most commonly-seen land-dwelling turtle in Readington, however, in decline due to habitat loss, pet trade, and cars; utilizes full complement of agricultural landscape, including woodlands, meadows and gardens; often soaks in mud or in very shallow water, or burrows under damp leaf-litter; eats berries, invertebrates, and mushrooms (even those poisonous to humans); most active on mornings after summer rains; during mating season, males can be seen following the smaller females in a slow-motion pursuit through wetland areas; females lay three eggs between May and June; can live over 100



BOX TURTLE

years; can completely hide inside shell, unlike most other turtles.



GREAT BLUE HERON



BARN SWALLOW



INDIGO BUNTING



RED-TAILED HAWK



SPRING PEEPER



OX EYE DAISY